WHAT IS CLAIMED IS:

1. A method for preventing unauthorized access to hardware management information comprising:

receiving a request for hardware component information in a service processor disposed in a hardware component as an open session request from a requesting client application, which request passed to the service processor external to an operating system controlling the hardware component;

transmitting from the service processor a challenge string to the requesting client application;

receiving in the service processor a challenge response from the requesting client application;

comparing the challenge response to an expected response to the challenge string; and

transmitting hardware component information to the requesting client application.

2. The method according to claim 1, wherein the challenge string includes a session identification number unique to each session.

3. The method according to claim 1, wherein the challenge response includes a session identification number unique to each session and assigned by the service processor.

4. The method according to claim 1, wherein the challenge response includes a sequence number that increments with every new message.

5. The method according to claim 1, wherein the challenge response includes a hash number, wherein the hash number is a function of one or more of the following: the challenge string, the session identification number, the sequence number and a password.

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1   6. The method according to claim 1, further comprising examining each packet

2 received from the client application for one or more of the following: the session

3 identification number, the sequence number and a hash number.

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1   7. The method according to claim 6, wherein the hash number is a function of

2 one or more of the following: the session identification number, the sequence number

3 and the packet itself.

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1   8. A method for preventing unauthorized access to hardware management

2 information comprising:

3   transmitting a request for hardware component information to a service

4 processor disposed in a hardware component as an open session request from a

5 requesting client application;

6   passing the request to the service processor external to an operating system

7 controlling the hardware component;

8   receiving from the service processor a challenge string at the requesting client

9 application;

10   transmitting to the service processor a challenge response from the requesting

11 client application; and

12   receiving from the service processor an authentication response to the requesting

13 client application based on a comparison of the challenge response from the requesting

14 client application and an expected challenge response calculated in the service

15 processor.

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1   9. The method according to claim 8, wherein the challenge string includes a

2 session identification number assigned by the service processor, which session

3 identification number is unique to each session, and the challenge response includes the

4 session identification number.

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1   10. The method according to claim 9, wherein the challenge response includes a

2 sequence number that increments with every new message from the requesting client

3 application.

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1   11. The method according to claim 8, wherein the challenge response includes a

2 hash number calculated by the requesting client application, and the hash number is a

3 function of one or more of the following: the challenge string, the session identification

4 number, the sequence number and a password.

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1   12. The method according to claim 8, further comprising transmitting with

2 each packet sent by the client application one or more of the following: the session

3 identification number, the sequence number and a hash number, and the hash number is

4 a function of one or more of the following: the session identification number, the

5 sequence number and the packet itself.

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1   13. An apparatus for authenticating a client application requesting access to a

2 particular component among a plurality of components, comprising:

3   a remote access port; and

4   a service processor disposed in the particular component, coupled to the remote

5 access port, and in response to a remote request for information about the particular

6 component received as an open session request through the remote access port external

7 to a host operating system, the service processor is programmed to:

8   transmit a challenge string to a requesting client application;

9   compare a challenge response received from the requesting client

10 application with an expected response to the challenge; and

11   transmit an authentication response to the requesting client application

12 based on the comparison.

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1   14. The apparatus according to claim 13, wherein service processor assigns a

2 session identification number unique to each session and transmits the session

3 identification number to the requesting client application in the challenge string.

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1   15. The apparatus according to claim 14, wherein the service processor reviews

2   the challenge response to determine if it contains the session identification number

3   transmitted in the challenge string.

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1   16. The apparatus according to claim 13, wherein the service processor

2   compares a sequence number included in the challenge response against previously

3   received sequence numbers and ignores the challenge response if it does not include a

4   sequence number in correct sequence.

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1   17. The apparatus according to claim 13, wherein the service processor

2   compares a hash number received in the challenge response with an expected hash

3   calculated by the service processor and transmits a success or failure message

4   depending upon a result of the comparison.

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1   18. The apparatus according to claim 17, wherein the hash includes one or more

2   of the following: the challenge string, the session identification number, the sequence

3   number and a password.

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1   19. The apparatus according to claim 13, wherein the service processor

2   examines each packet sent by the client application for one or more of the following:

3   the session identification number, the sequence number and a hash number, wherein the

4   hash number is a function of one or more of the following: the session identification

5   number, the sequence number and the packet itself.

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1   20. A system for accessing hardware component information from a computer,

2   comprising:

3   a service processor disposed in the computer;

4   a server remotely coupled to the service processor in the computer;

5   a client application to execute on the server, wherein the service processor

6   authenticates requests from the client application requesting access to the service

7   processor's host hardware module, which request bypasses an operating system of the

8   computer, and the service processor in response to a request for access to the host

9   hardware module is programmed to:

10   transmit a challenge string to a requesting client application;

11   compare a challenge response received from the requesting client

12   application with an expected response to the challenge; and

13   transmit an authentication response to the requesting client application

14   based on the comparison.

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1   21. The system according to claim 20, wherein each of the service processors

2   assigns a session identification number unique to each session and transmits the session

3   identification number to the requesting client application in the challenge string.

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1   22. The system according to claim 20, wherein each of the service processors

2   reviews the challenge response to determine if it contains the session identification

3   number transmitted in the challenge string.

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1   23. The system according to claim 20, wherein each of the service processors

2   compares a sequence number included in the challenge response against previously

3   received sequence numbers and ignores the challenge response if it does not include a

4   sequence number in correct sequence.

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1   24. The system according to claim 20, wherein each of the service processors

2   compares a hash number received in the challenge response with an expected hash

3   calculated by the service processor and transmits a success or failure message

4   depending upon a result of the comparison.

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1   25. The system according to claim 24, wherein the hash includes one or more of

2   the following: the challenge string, the session identification number, the sequence

3   number and a password.

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1   26. The system according to claim 20, wherein each of the service processors

2   examines each packet sent by the client application for one or more of the following:

3   the session identification number, the sequence number and a hash number, wherein the

4   hash number is a function of one or more of the following: the session identification

5   number, the sequence number and the packet.

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1   27. A method for verifying integrity of a data packet comprising:

2   receiving the data packet in a service processor disposed in a hardware

3   component from a client application, which data packet passes external to an operating

4   system and a system processor otherwise controlling operation of the hardware

5   component;

6   receiving with the data packet a keyed hash of the data packet; and

7   comparing the keyed hash with the data packet to an expected keyed hash.

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1   28. The method according to claim 27, wherein the keyed hash is a function of

2   one or more of the following: a session identification number, a sequence number, a

3   password and the data packet.

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1   29. A method for verifying integrity of a data packet comprising:

2   transmitting a data packet to a service processor disposed in a hardware

3   component from a client application, which data packet passes external to an operating

4   system and system processor otherwise controlling the hardware component;

5   calculating a keyed hash of the data packet; and

6   transmitting to the service processor the keyed hash along with the data packet.

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1   30. The method according to claim 29, wherein the keyed hash is a function of

2   one or more of the following: a session identification number, a sequence number, a

3   password and the packet.

1   31. An apparatus for preventing unauthorized access to hardware management

2   information comprising a computer readable media having programming instructions

3   encoded thereon, instructing a processor to:

4   receive a request for hardware component information in a service processor

5   disposed in a hardware component as an open session request, which request passes

6   external to an operating system controlling the hardware component;

7   transmit from the service processor a challenge string to the requesting client

8   application;

9   receive in the service processor a challenge response from the requesting client

10 application;

11   compare the challenge response to an expected response to the challenge; and

12   transmit from the service processor an authentication response to the requesting

13 client application based on the comparison.

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1   32. An apparatus for preventing unauthorized access to hardware management

2   information comprising a computer readable media having programming instruction

3   encoded thereon instructing a processor to:

4   transmit a request for hardware component information to a service processor

5   disposed in a hardware component as an open session request from a requesting client

6   application, which request passes external to an operating system controlling the

7   hardware component;

8   receive from the service processor a challenge string at the requesting client

9   application;

10   transmit to the service processor a challenge response from the requesting client

11 application; and

12   receive from the service processor an authentication response to the requesting

13 client application based on a comparison of the challenge response from the requesting

14 client application and an expected challenge response calculated in the service

15 processor.

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1 33. An apparatus for verifying integrity of a data packet comprising a computer

2 readable media having programming instructions encoded thereon instructing a

3 processor to:

4   receive the data packet and a keyed hash in a service processor disposed in a

5 hardware component from a client application, which data packet and keyed hash pass

6 external to an operating system and a system processor otherwise controlling operation

7 of the hardware component;

8   calculate an expected a keyed hash of the data packet; and

9   compare the received keyed hash with the expected keyed hash.